

CLAIMS

What is claimed:

1. A device for fixing and adjusting a member to be supported, comprising:

a support base;

two triangular levers, each of the said levers comprising two arms disposed in a triangle and connected together at one of the vertices of the triangle, each of the said levers being articulated on said support base at its respective vertex, a first one of the two arms of each lever being extendable and connected at its free end to means of fixing support to said member; and

adjustment means mounted on said support base and arranged to make the second arm of each lever pivot in the plane of said lever.

2. The device according to Claim 1, wherein each of said levers is articulated on said support base about an axis substantially perpendicular to the plane of said lever.

3. The device according to Claim 2, wherein each of said levers is articulated on said support base by means of a blade substantially perpendicular to the plane of the respective lever.

4. The device according to Claim 1, wherein said two levers are substantially in the same plane.

5. The device according to Claim 1, wherein the first arm of each lever is articulated on the second arm at the respective vertex of the lever.

6. The device according to Claim 1, wherein the first arm of each lever is articulated on said fixing means.

7. The device according to Claim 5, wherein the articulations are articulations of the swivel type.

8. The device according to Claim 7, wherein each of the articulations comprises at least a first blade and a second blade, said first blade is substantially in a plane of the respective lever and said second blade is substantially perpendicular to the plane.

9. The device according to Claim 8, wherein said second blade is in a plane substantially parallel to the first arm of the respective lever.

10. The device according to Claim 8, wherein each of said levers is articulated on the base means of a blade substantially perpendicular to the plane of the respective layer, wherein said first blade, by which the lever is articulated on the base, is in a plane substantially parallel to that of said second blade.

11. The device according to Claim 3, wherein the said blades are produced in a single piece with the respective lever.

12. The device according to Claim 1, wherein the said adjustment means are means of adjustment without play.

13. The device according to Claim 12, wherein said adjustment means comprise a thrust finger actuated by a motor) and acting on said second arm of the respective lever counter to the action of the elastic means.

14. The device according to Claim 13, wherein said motor is a piezoelectric actuator.

15. The device according to Claim 13, wherein said motor is removable.

16. The device of claim 1, further comprising: three devices each having said two triangular levers and said adjustment means, wherein a respective fixing means of each device is arranged so as to be fixed to the member at three distinct points.

17. The device according to Claim 16, wherein said three devices are disposed about a central axis in rotation symmetry of substantially 120° .

18. A supporting device comprising:

- a support;
- a plurality of levers;
- each of said levers having at least a first arm and a second arm substantially disposed in a triangle and connected together at a selected vertex of the triangle;
- each of said levers being articulated on said support at its respective vertex,
- said first arm being selectively extendable; and
- an adjuster extending from said support base and operable to allow said second arm of each of said levers to rotate along a selected plane.

19. An apparatus comprising:

an optical member;

a base;

at least three devices, wherein each device comprises:

(a) a plurality of levers;

each of said levers having at least a first member and a second member substantially oriented in a triangular manner and connected together substantially at a selected vertex of the triangle;

each of said levers being articulated on said base substantially at its respective vertex,

said first member being selectively extendable and operably connected to the optical member; and

(b) an adjustment assembly mounted on said base and arranged to make said second member of each of said levers move along a selected plane; and

(c) a fixing assembly operably interconnected to said device;

wherein said fixing assembly of each of said three devices is arranged so as to be fixed to the optical member at at least three distinct points.